

NEW VISES FOR BICYCLE MANUFACTURERS.

FIG. 1468.

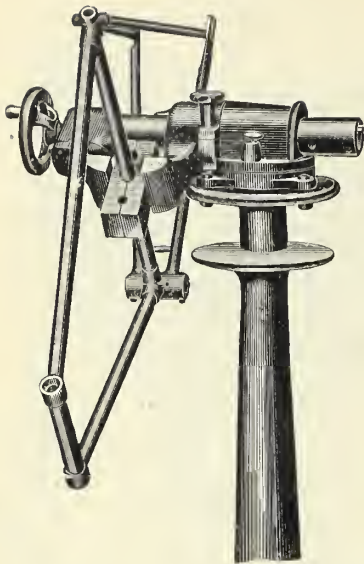


FIG. 1469.

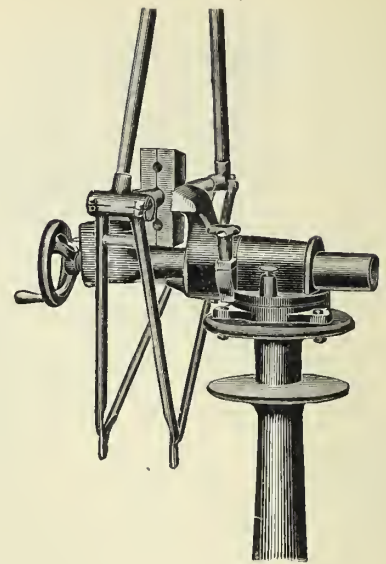


FIG. 1470.



This vise has no equal for convenience and as a time saver.

The accompanying cuts illustrate the several positions in which frame can be instantly adjusted, by action of the revolving sleeve, necessitating no change in the clamping of the frame; also showing stand, with tool bracket, especially adapted for use with vise.

Bicycle manufacturers will at once recognize the value of this vise as a time-saver, and for convenience in the filing of the frames. The record of it so far is that 25 per cent. more work can be accomplished, as compared with the use of the ordinary style of vise.

A wheel is used in place of lever to clamp vise, thus increasing the speed of action and offering greater convenience. When the frame is clamped, the same can be rotated to right or left instantly, describing a complete circle if desired, without changing the original position of frame in vise. This revolving action enables the operator to easily reach any part of the frame, and fully complete the work of filing without once changing the clamp on the frame.

The vise is swiveled to base, and is adapted to use on a bench, as any ordinary vise, but we recommend the use of our vise stand, because of its economy in room and the advantages to operator in being able to adjust frame to any position.

FIG. 1471.

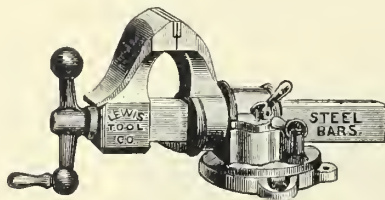
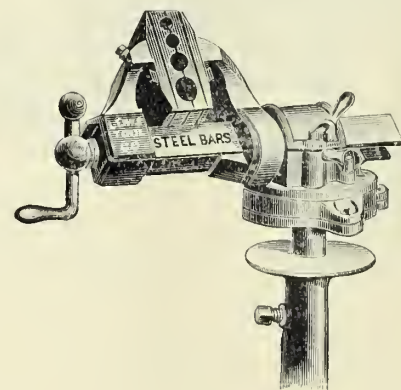


FIG. 1472.



PATENT BICYCLE VISE.

With Clamp and Adjustable Post.

This vise is made especially for holding bicycle frames, and is equally good as an assembling vise for sewing machines, gun and pistol work, and for many other purposes. It has our patent swivel bottom. The jaws are made to revolve, and be firmly held at any desired position. The slide bars are of wrought steel.

In making this vise, we have consulted the wishes of the people who use this kind of tool, and we believe it is the best on the market. They are furnished with balance crank to move jaws quickly, as shown in cut, or with the usual lever, as ordered.

The clamp is firmly held on vise jaws as shown in above cut

The grooves in wood part of clamp are made $\frac{5}{8}$, $\frac{3}{4}$, 1 inch, and $1\frac{1}{8}$ inch in diameter, but they can be bored to any required size, and as the woods are screwed on, they can be easily renewed.

The iron post for holding vise is made adjustable to any required height to suit workman, from 30 to 38 inches.

These vises are sold with or without clamp or post.

No. 110.	Width of jaws, 4 inches; open, $5\frac{1}{2}$ inches; weight, 56 pounds,	-	-	-	-	-	-	-	-	price, \$12 00
" 111.	Wood faced, malleable iron clamp,	-	-	-	-	-	-	-	-	" 1 50
" 113.	Adjustable iron post,	-	-	-	-	-	-	-	-	" 6 00